

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application.

WHAT IS CLAIMED IS:

1. (original) A lamp driving apparatus, comprising:

a controller, generating a control signal for lighting at least one of plural sets of lamps, each set having at least a first lamp and a second lamp, and generating a switching signal; and

a lamp driver, supplying power to the at least one of sets of lamps in accordance with both of the control signal and the switching signal,

wherein the switching signal causes the lamp driver to apply voltage to the first lamp and the second lamp of each of the at least one of sets of lamps with a shift of a prescribed time.

2. (original) The lamp driving apparatus as set forth in claim 1, wherein the lamp driver performs a logic operation AND on the control signal and the switching signal, and supplies the power to the sets of lamps in accordance with operation results.

3. (original) The lamp driving apparatus as set forth in claim 1, wherein the controller continues to output the control signal and the switching signal until turning-off of the set of lamps so that the lamp driver continuously applies the voltage to the sets of lamps.

4. (original) The lamp driving apparatus as set forth in claim 1, wherein the controller outputs the control signal and the switching signal causing the lamp driver to

repeat application and non-application of voltage to the sets of lamps in a prescribed cycle for dimming the sets of lamps.

5. (original) The lamp driving apparatus as set forth in claim 1, wherein the switching signal includes a first switching signal for the first lamp and a second switching signal for the second lamp, the first switching signal being independent of the second switching signal; and

wherein the controller monitors the first switching signal and the second switching signal, and generates the first switching signal and the second switching signal causing the lamp driver to apply the voltage to the first lamp and the second lamp with the shift of the prescribed time.

6. (original) The lamp driving apparatus as set forth in claim 1, wherein the lamp driver includes:

a logical multiplication circuit which performs a logical multiplication operation on the control signal and the switching signal, and which outputs a lamp load control signal on the basis of a logic operation result; and

a switching element which supplies the power to the sets of lamps in accordance with the lamp load control signal.

7. (original) The lamp driving apparatus as set forth in claim 6, wherein the lamp load control signal includes a first lamp load control signal for the first lamp and a second lamp load control signal for the second lamp, the first load control signal being independent of the second lamp load control signal; and

wherein the controller monitors the first lamp load control signal and the second lamp load control signal, and generates the first switching signal and the second switching signal causing the lamp driver to apply the voltage to the first lamp and the second lamp with the shift of the prescribed time.

8. (original) The lamp driving apparatus as set forth in claim 1, wherein the lamp is incandescent bulb having a filament.

9. (original) A lamp driving apparatus, comprising:

a controller, generating a control signal for lighting at least one of plural sets of lamps, each set having at least a first lamp and a second lamp, and generating a switching signal, and outputting a lamp load control signal on the basis of the control signal and the switching signal; and

a lamp driver, supplying power to the at least one of sets of lamps in accordance with the lamp load control signal,

wherein the lamp load control signal causes the lamp driver to apply voltage to the first lamp and the second lamp of each of the at least one of sets of lamps with a shift of a prescribed time.

10. (original) The lamp driving apparatus as set forth in claim 9, wherein the controller performs a logical multiplication operation on the control signal and the switching signal, and generates the lamp load control signal causing the lamp driver to supply the power to the sets of lamps in accordance with operation results.

11. (original) The lamp driving apparatus as set forth in claim 9, wherein the controller continues to output the lamp load control signal until turning-off of the set of lamps so that the lamp driver continuously applies the voltage to the sets of lamps.

12. (original) The lamp driving apparatus as set forth in claim 9, wherein the controller outputs the lamp load control signal causing the lamp driver to repeat application and non-application of voltage to the sets of lamps in a prescribed cycle for dimming the sets of lamps.

13. (original) The lamp driving apparatus as set forth in claim 9, wherein the switching signal includes a first switching signal for the first lamp and a second switching signal for the second lamp, the first switching signal being independent of the second switching signal; and

wherein the controller monitors the first switching signal and the second switching signal, and generates the first switching signal and the second switching signal causing the lamp driver to apply the voltage to the first lamp and the second lamp with the shift of the prescribed time.

14. (original) The lamp driving apparatus as set forth in claim 9, wherein the controller includes a logical multiplication circuit which performs a logical multiplication operation on the control signal and the switching signal, and which generates the lamp load control signal on the basis of a logic operation result; and

wherein the lamp driver includes a switching element which supplies the power to the sets of lamps in accordance with the lamp load control signal.

15. (original) The lamp driving apparatus as set forth in claim 14, wherein the lamp load control signal includes a first lamp load control signal for the first lamp and a second lamp load control signal for the second lamp, the first load control signal being independent of the second lamp load control signal; and

wherein the controller monitors the first lamp load control signal and the second lamp load control signal, and generates the first switching signal and the second switching signal causing the lamp driver to apply the voltage to the first lamp and the second lamp with the shift of the prescribed time.

16. (original) The lamp driving apparatus as set forth in claim 9, wherein the lamp is incandescent bulb having a filament.

17. (currently amended) A method for driving lamp, comprising the steps of:
providing a plurality of sets of lamps, each set having at least a first lamp and a second lamp; and

applying voltage to a first lamp and a second lamp of each of the at least one of the sets of lamps with a shift of a prescribed time; and
monitoring the shift of the voltage to be applied to the first lamp and the second lamp.

18. (cancelled)

19. (original) The method of driving lamps as set forth in claim 17, wherein the voltage is continuously applied to the set of lamps after the sets of lamps are turned on.

20. (original) The lamp driving method as set forth in claim 17, wherein voltage application and non-application to the sets of lamps are repeated in a prescribed cycle so that the set of lamps are dimmed after the sets of lamps are turned on.

21. (original) The lamp driving method as set forth in claim 17, wherein the lamp is incandescent bulb having a filament.